On Programming Multi-Agent Systems

Prof. Jørgen Villadsen

Technical University of Denmark

In the first part I look at a theater performance by artistic director Troels Christian Jakobsen as a multi-agent system. It is designed as a self-organizing critical system using a framework where within its borders but without a script there is real interaction between the elements of the performance and it has served as a case study for organization-oriented programming. In the second part I discuss recent work on inconsistency handling in multi-agent systems with focus on a paraconsistent computational logic and a belief revision procedure. In the third and final part I present our projects in connection with the international agent programming contest 2009-2013. In all three parts the agent programming language GOAL is used.